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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/022,097

DATE: 06/26/2002

TIME: 09:44:15

Input Set : A:\GC714-seqlist.txt

Output Set: N:\CRF3\06262002\J022097.raw

4 <110> APPLICANT: Schellenberger, Volker  
6 <120> TITLE OF INVENTION: Targeted Enzyme Prodrug Therapy  
9 <130> FILE REFERENCE: GC714  
11 <140> CURRENT APPLICATION NUMBER: US 10/022,097  
C--> 12 <141> CURRENT FILING DATE: 2002-06-13  
14 <150> PRIOR APPLICATION NUMBER: US 60/279,609  
15 <151> PRIOR FILING DATE: 2001-03-28  
17 <150> PRIOR APPLICATION NUMBER: US 60/255,774  
18 <151> PRIOR FILING DATE: 2000-12-14  
20 <160> NUMBER OF SEQ ID NOS: 43  
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
24 <210> SEQ ID NO: 1  
25 <211> LENGTH: 361  
26 <212> TYPE: PRT  
27 <213> ORGANISM: Enterobacter cloacae  
29 <400> SEQUENCE: 1  
30 Thr Pro Val Ser Glu Lys Gln Leu Ala Glu Val Val Ala Asn Thr Ile  
31 1 5 10 15  
32 Thr Pro Leu Met Lys Ala Gln Ser Val Pro Gly Met Ala Val Ala Val  
33 20 25 30  
34 Ile Tyr Gln Gly Lys Pro His Tyr Tyr Thr Phe Gly Lys Ala Asp Ile  
35 35 40 45  
36 Ala Ala Asn Lys Pro Val Thr Pro Gln Thr Leu Phe Glu Leu Gly Ser  
37 50 55 60  
38 Ile Ser Lys Thr Phe Thr Gly Val Leu Gly Gly Asp Ala Ile Ala Arg  
39 65 70 75 80  
40 Gly Glu Ile Ser Leu Asp Asp Ala Val Thr Arg Tyr Trp Pro Gln Leu  
41 85 90 95  
42 Thr Gly Lys Gln Trp Gln Gly Ile Arg Met Leu Asp Leu Ala Thr Tyr  
43 100 105 110  
44 Thr Ala Gly Gly Leu Pro Leu Gln Val Pro Asp Glu Val Thr Asp Asn  
45 115 120 125  
46 Ala Ser Leu Leu Arg Phe Tyr Gln Asn Trp Gln Pro Gln Trp Lys Pro  
47 130 135 140  
48 Gly Thr Thr Arg Leu Tyr Ala Asn Ala Ser Ile Leu Gly Phe Gly Ala  
49 145 150 155 160  
50 Leu Ala Val Lys Pro Ser Gly Met Pro Tyr Glu Gln Ala Met Thr Thr  
51 165 170 175  
52 Arg Val Leu Lys Pro Leu Lys Leu Asp His Thr Trp Ile Asn Val Pro  
53 180 185 190  
54 Lys Ala Glu Glu Ala His Tyr Ala Trp Gly Tyr Arg Asp Gly Lys Ala  
55 195 200 205  
56 Val Arg Val Ser Pro Gly Met Leu Asp Ala Gln Ala Tyr Gly Val Lys

P.6

ENTERED

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```

57      210      215      220
58 Thr Asn Val Gln Asp Met Ala Asn Trp Val Met Ala Asn Met Ala Pro
59 225      230      235      240
60 Glu Asn Val Ala Asp Ala Ser Leu Lys Gln Gly Ile Ala Leu Ala Gln
61      245      250      255
62 Ser Arg Tyr Trp Arg Ile Gly Ser Met Tyr Gln Gly Leu Gly Trp Glu
63      260      265      270
64 Met Leu Asn Trp Pro Val Glu Ala Asn Thr Val Val Glu Gly Ser Asp
65      275      280      285
66 Ser Lys Val Ala Leu Ala Pro Leu Pro Val Ala Glu Val Asn Pro Pro
67      290      295      300
68 Ala Pro Pro Val Lys Ala Ser Trp Val His Lys Thr Gly Ser Thr Gly
69 305      310      315      320
70 Gly Phe Gly Ser Tyr Val Ala Phe Ile Pro Glu Lys Gln Ile Gly Ile
71      325      330      335
72 Val Met Leu Ala Asn Thr Ser Tyr Pro Asn Pro Ala Arg Val Glu Ala
73      340      345      350
74 Ala Tyr His Ile Leu Glu Ala Leu Gln
75      355      360
77 <210> SEQ ID NO: 2
78 <211> LENGTH: 8
79 <212> TYPE: PRT
80 <213> ORGANISM: Enterobacter cloacae
82 <400> SEQUENCE: 2
83 Arg Leu Tyr Ala Asn Ala Ser Ile
84 1 5
86 <210> SEQ ID NO: 3
87 <211> LENGTH: 8
88 <212> TYPE: PRT
89 <213> ORGANISM: Enterobacter cloacae
91 <400> SEQUENCE: 3
92 Val His Lys Thr Gly Ser Thr Gly
93 1 5
95 <210> SEQ ID NO: 4
96 <211> LENGTH: 50
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <223> OTHER INFORMATION: primer
103 <400> SEQUENCE: 4
104 gggcccgac atccaaagct tgtcgacagg aagcgggaaca cgtagaaagc 50
106 <210> SEQ ID NO: 5
107 <211> LENGTH: 50
108 <212> TYPE: DNA
109 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: primer
114 <400> SEQUENCE: 5
115 aagcttttga tgtccgggcc cgaattcgtg tgaaattgtt atccgctcac 50

```

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Input Set : A:\GC714-seqlist.txt

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```

117 <210> SEQ ID NO: 6
118 <211> LENGTH: 88
119 <212> TYPE: DNA
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: synthetic oligonucleotide
W--> 125 <221> NAME/KEY: misc_feature
126 <222> LOCATION: (1)...(88)
127 <223> OTHER INFORMATION: n = A,T,C or G
W--> 129 <400> 6
W--> 130 ttccaggcat ggcggtggcc gttatttatn nsnsnsnsnn snsnsnsns nnsaaaccgc      60
131 actattacac atttggaag gccgacat      88
133 <210> SEQ ID NO: 7
134 <211> LENGTH: 88
135 <212> TYPE: DNA
136 <213> ORGANISM: Artificial Sequence
138 <220> FEATURE:
139 <223> OTHER INFORMATION: synthetic oligonucleotide
W--> 141 <221> NAME/KEY: misc_feature
142 <222> LOCATION: (1)...(88)
143 <223> OTHER INFORMATION: n = A,T,C or G
W--> 145 <400> 7
W--> 146 cgcgatgtcg gccttgccaa atgtgtaata gtgcggttts nnsnsnsnsn nsnsnsnsnn      60
W--> 147 snnataaata acggccaccg ccatgcct      88
149 <210> SEQ ID NO: 8
150 <211> LENGTH: 74
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: synthetic oligonucleotide
157 <400> SEQUENCE: 8
158 ctaggtcttc tactagtta attgtcttag tcgtagctcc atctgcagtt gaagactctc      60
159 tactggcggg ttg      74
161 <210> SEQ ID NO: 9
162 <211> LENGTH: 77
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: primer
W--> 169 <221> NAME/KEY: misc_feature
170 <222> LOCATION: (1)...(77)
171 <223> OTHER INFORMATION: n = A,T,C or G
W--> 173 <400> 9
W--> 174 cgcttgccgc gttgcccggt gcagaagtga atnnsnsnsn snsnsnsns nnsnnstcct      60
175 ggggtccataa aactggc      77
177 <210> SEQ ID NO: 10
178 <211> LENGTH: 77
179 <212> TYPE: DNA
180 <213> ORGANISM: Artificial Sequence

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```

182 <220> FEATURE:
183 <223> OTHER INFORMATION: primer
W--> 185 <221> NAME/KEY: misc_feature
186 <222> LOCATION: (1)...(77)
187 <223> OTHER INFORMATION: n = A,T,C or G
W--> 189 <400> 10
W--> 190 tagagccagt tttatggacc caggasnnsn nsnnnsnnnn snnnsnnna ttcacttctg      60
191 ccacgggcaa cggcgca      77
193 <210> SEQ ID NO: 11
194 <211> LENGTH: 95
195 <212> TYPE: DNA
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: primer
W--> 201 <221> NAME/KEY: misc_feature
202 <222> LOCATION: (1)...(95)
203 <223> OTHER INFORMATION: n = A,T,C or G
W--> 205 <400> 11
W--> 206 cgcttgccg gttgcccggtg gcagaagtga atnnnsnnnn snnnsnnns nnnnsnnnn      60
W--> 207 nsnnnsnnnn snnstcctgg gtccataaaa ctggc      95
209 <210> SEQ ID NO: 12
210 <211> LENGTH: 95
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: primer
W--> 217 <221> NAME/KEY: misc_feature
218 <222> LOCATION: (1)...(95)
219 <223> OTHER INFORMATION: n = A,T,C or G
W--> 221 <400> 12
W--> 222 tagagccagt tttatggacc caggasnnsn nsnnnsnnnn snnnsnnns nnnnsnnnn      60
W--> 223 nsnnnnnatt cacttctgcc acgggcaacg gcgca      95
225 <210> SEQ ID NO: 13
226 <211> LENGTH: 95
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: primer
W--> 233 <221> NAME/KEY: misc_feature
234 <222> LOCATION: (1)...(95)
235 <223> OTHER INFORMATION: n = A,T,C or G
W--> 237 <400> 13
W--> 238 cgcttgccg gttgcccggtg gcagaagtga atsngdhcsn gdhcsngdhc aagdhcsngd      60
W--> 239 hcsngdhcsn gdhctcctgg gtccataaaa ctggc      95
241 <210> SEQ ID NO: 14
242 <211> LENGTH: 28
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:

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DATE: 06/26/2002

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Input Set : A:\GC714-seqlist.txt

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```

247 <223> OTHER INFORMATION: primer
249 <400> SEQUENCE: 14
250 attcacttct gccacgggca acggcgca 28
252 <210> SEQ ID NO: 15
253 <211> LENGTH: 25
254 <212> TYPE: DNA
255 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:
258 <223> OTHER INFORMATION: primer
260 <400> SEQUENCE: 15
261 tagagccagt tttatggacc cagga 25
263 <210> SEQ ID NO: 16
264 <211> LENGTH: 84
265 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: primer
271 <400> SEQUENCE: 16
272 tgccccgcgg ccgctaattg tcttaggcgg atgccatgtg cagtactaga agacggcgta 60
273 tcgggtcaat gtatcagggt ctcg 84
275 <210> SEQ ID NO: 17
276 <211> LENGTH: 26
277 <212> TYPE: DNA
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: primer
283 <400> SEQUENCE: 17
284 agacaattag cggccgcggg ccatgt 26
286 <210> SEQ ID NO: 18
287 <211> LENGTH: 28
288 <212> TYPE: DNA
289 <213> ORGANISM: Artificial Sequence
291 <220> FEATURE:
292 <223> OTHER INFORMATION: primer
294 <400> SEQUENCE: 18
295 cagccgagac cctgatacat tgaccgga 28
297 <210> SEQ ID NO: 19
298 <211> LENGTH: 68
299 <212> TYPE: DNA
300 <213> ORGANISM: Artificial Sequence
302 <220> FEATURE:
303 <223> OTHER INFORMATION: primer
W--> 305 <221> NAME/KEY: misc_feature
306 <222> LOCATION: (1)...(68)
307 <223> OTHER INFORMATION: n = A,T,C or G
W--> 309 <400> 19
W--> 310 tggccccgga gnnsnnsnns nnsnnsnsc ttaagcaggg catcgcgctg gcgcagtcgc 60
311 gctactgg 68
313 <210> SEQ ID NO: 20

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/022,097DATE: 06/26/2002  
TIME: 09:44:16Input Set : A:\GC714-seqlist.txt  
Output Set: N:\CRF3\06262002\J022097.rawPlease Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; N Pos. 30,31,33,34,36,37,39,40,42,43,45,46,48,49,51,52  
Seq#:7; N Pos. 41,42,44,45,47,48,50,51,53,54,56,57,59,60,62,63  
Seq#:9; N Pos. 33,34,36,37,39,40,42,43,45,46,48,49,51,52,54,55  
Seq#:10; N Pos. 27,28,30,31,33,34,36,37,39,40,42,43,45,46,48,49  
Seq#:11; N Pos. 33,34,36,37,39,40,42,43,45,46,48,49,51,52,54,55,57,58,60,61  
Seq#:11; N Pos. 63,64,66,67,69,70,72,73  
Seq#:12; N Pos. 27,28,30,31,33,34,36,37,39,40,42,43,45,46,48,49,51,52,54,55  
Seq#:12; N Pos. 57,58,60,61,63,64,66,67  
Seq#:13; N Pos. 34,40,46,58,64,70  
Seq#:19; N Pos. 12,13,15,16,18,19,21,22,24,25,27,28  
Seq#:20; N Pos. 45,46,48,49,51,52,54,55,57,58,60,61  
Seq#:21; N Pos. 12,13,15,16,18,19,21,22,24,25,27,28,30,31,33,34,36,37,39,40  
Seq#:22; N Pos. 45,46,48,49,51,52,54,55,57,58,60,61,63,64,66,67,69,70,72,73  
Seq#:24; N Pos. 30,31,33,34,36,37,39,40,42,43,45,46,48,49,51,52  
Seq#:26; N Pos. 33,34,36,37,39,40,42,43,45,46,48,49,51,52,54,55,57,58,60,61  
Seq#:26; N Pos. 63,64,66,67,69,70,72,73  
Seq#:29; Xaa Pos. 36  
Seq#:30; Xaa Pos. 42  
Seq#:31; Xaa Pos. 42  
Seq#:32; Xaa Pos. 42  
Seq#:33; Xaa Pos. 42  
Seq#:34; Xaa Pos. 42  
Seq#:35; Xaa Pos. 42  
Seq#:36; Xaa Pos. 42  
Seq#:37; Xaa Pos. 42  
Seq#:38; Xaa Pos. 42  
Seq#:39; Xaa Pos. 42  
Seq#:40; Xaa Pos. 1,3,5,9,11,13  
Seq#:41; N Pos. 34,40,46,58,64,70